Serial No.: 10/091,634
Filed: March 5, 2002
Applicant: James R. Mock, Sr. et al.
Group Art Unit: 3743
Examiner: N. Patel

Remarks

This Amendment After Final is being submitted in reply to the Final Office Action dated August 20, 2004. Claims 2-5 and 7-27 are pending in the application, and claims 2-5 and 7-27 have been rejected by the Examiner.

The Examiner has rejected claims 2-5 and 7-27 under 35 U.S.C. 103(a) as being unpatentable over Nelli et al. in view of Schaub. In the Claim Rejections section of the Final Office Action, the Examiner stated that Nelli et al. discloses the claimed invention with the exception of providing a bag that is replaceable and that Schaub discloses a dispenser to dispense chemicals with a bag that is replaceable. The Examiner also stated in the Response to Arguments section of the Final Office Action that it is obvious to one of ordinary skill in the art to have replaced the bag of chemicals in the dispensing device of Nelli et al. in order to enable a user to reuse the device.

Applicants respectfully submit that neither Nelli et al. nor Schaub discloses a replaceable bag of chemicals. Nelli et al. discloses in column 2, line 57 to column 3, line 17 a chemical retaining and metering assembly to prevent a chemical from entering the annular space of the receptacle when the assembly is recharged with the chemical. The chemical is poured into the assembly when more chemical is needed; the assembly is not replaced each time more chemical is needed. Schaub discloses in column 4, lines 36 to 60 a tablet that is a solid material soluble in water placed within a compartment of a float dispenser. The float dispenser does not include a replaceable bag of chemicals because the tablet of solid material is placed within the compartment. Neither the pouring of a chemical into a chemical retaining and metering assembly nor the placing a tablet of solid material into a compartment of a float dispenser teaches or suggests a replaceable bag of chemicals.

More specifically, as recited in claim 2, the permeable bag containing the cyanuric acid is placed into a cavity of a feeder. The cyanuric acid is not poured into an assembly as in Nelli et

al., and the cyanuric acid is not a tablet of solid material placed into a compartment as in Schaub. Because neither Nelli et al. nor Schaub teaches or suggests placing a permeable bag containing a chemical into a cavity of a feeder, allowance of claim 2 is respectfully requested. Because claims 3-5 and 23 depend upon claim 2, it is respectfully requested that these claims also be allowed.

As recited in claims 8, 13, 24, and 25, the permeable member is a bag containing the cyanuric acid. The cyanuric acid is not poured into an assembly as in Nelli et al., and the cyanuric acid is not a tablet of solid material placed into a compartment as in Schaub. Because neither Nelli et al. nor Schaub teaches or suggests a bag containing a chemical, allowance of claims 8, 13, 24, and 25 is respectfully requested.

As recited in claims 17 and 26, the means for preventing the cyanuric acid from flowing out of the outlet in a solid form is a permeable bag containing the cyanuric acid. Because neither Nelli et al. nor Schaub teaches or suggests using a permeable bag containing a chemical, allowance of claims 17 and 26 is respectfully requested.

As recited in claim 19, an opening of a permeable bag in which a desired quantity of cyanuric acid is placed is sealed thereby containing the cyanuric acid. Because neither Nelli et al. nor Schaub teaches or suggests sealing a desired quantity of cyanuric acid in a permeable bag, allowance of claim 19 is respectfully requested. Because claims 20-21 and 27 depend upon claim 19, it is respectfully requested that these claims also be allowed.

As recited in claim 22, a desired amount of the cyanuric acid is contained within the permeable bag, and the permeable bag is replaced with a new permeable bag containing cyanuric acid when the cyanuric acid has been depleted from the permeable bag. Because neither Nelli et al. nor Schaub teaches or suggests replacing a permeable bag with a new permeable bag when the cyanuric acid has been depleted from the permeable bag, allowance of claim 22 is respectfully requested.

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The Examiner stated that in view of Schaub, it would have been obvious to one of ordinary skill to have dispensed cyanuric acid in the device of Nelli et al. in order to stabilize chlorine in a swimming pool. Applicants respectfully submit that "a cyanuric acid compound", as recited in column 4, lines 41-45 of Schaub, is not equivalent to cyanuric acid. Cyanuric acid, by itself, cannot feasibly be manufactured into a tablet form for dispensing in the float dispenser of Schaub for two reasons. First, cyanuric acid has very poor solubility in water. In granular form, it takes approximately 6 to 8 hours to fully dissolve, and in tablet form as in Schaub, it would take several days to fully dissolve, which is too long to sufficiently stabilize chlorine in a swimming pool with a high volume of use. Second, because of the density of cyanuric acid, it is very difficult to compress and bond cyanuric acid particles together to form a tablet. The tablets tend to crack and crumble apart. "A cyanuric acid compound" includes cyanuric acid and another compound, not just cyanuric acid by itself. Further, the example in Schaub in column 4, lines 41 to 45 uses trichloro-s triazinetrione, and the use of cyanuric acid by itself is neither taught nor suggested in Schaub. Therefore, Applicants submit that the use of "a cyanuric acid compound" in a float dispenser does not render the present invention obvious. All the claim limitations must be taught or suggested by the prior art, and because using cyanuric acid by itself is neither taught nor suggested, the present invention is not obvious.

In the Response to Arguments section of the Final Office Action, the Examiner stated that Applicants' arguments were not persuasive because using cyanuric acid by itself was not recited in the claims. Claims 2, 7, 11, 16, and 22 have been amended to recite a chemical consisting essentially of cyanuric acid to more clearly recite that cyanuric acid is used by itself. Favorable consideration of these amended claims is respectfully requested.

In addition to the fact that "a cyanuric acid compound" is not equivalent to cyanuric acid, Applicants respectfully submit that there is no basis in the art for selecting and combining these references to render the present invention obvious. The device of Schaub is not a metering device for dispensing a cyanuric acid compound, and the mere fact that a cyanuric acid

compound is dispensed in a float dispenser does not render the present invention obvious to one skilled in the art. Using a float dispenser is not much different than broadcasting a chemical into the swimming pool because the chemical is dispensed as the surface of the chemical is exposed to the water, not by metering the chemical in a use solution into the swimming pool. Therefore, because it is neither taught nor suggested to meter the dispensing of a cyanuric acid compound in a use solution in Schaub and because cyanuric acid is not dispensed from the device of Nelli et al., it is not obvious to place cyanuric acid into the dispenser of Nelli et al. Applicants submit that the present invention in not obvious to one skilled in the art.

Even if it were obvious to combine the two cited references, the combined references do not result in the present invention. Placing the compound in tablet form of Schaub, "a cyanuric acid compound", in the dispenser of Nelli et al. would not result in the present invention. Neither reference teaches or suggests using cyanuric acid by itself in a metering dispenser. The present invention dispenses a desired amount of cyanuric acid into a swimming pool to stabilize the chlorine in the swimming pool. Again, cyanuric acid alone, not in combination with another compound, is dispensed in addition to chlorine in an independent dispenser, not within the same dispenser or in lieu of the chlorine dispenser. It is not simply placing cyanuric acid within an existing chlorine dispenser, and the permeable bag includes a mesh specific to cyanuric acid so that the desired amount of cyanuric acid is dispensed. It is important to dispense an appropriate amount of cyanuric acid into the swimming pool to stabilize the chlorine without "blocking" the chlorine. Therefore, the present invention is not obvious in view of these references.

The Examiner also stated that in view of Schaub, it would have been obvious to one of ordinary skill in the art to have replaced the bag of chemicals in the dispensing device of Nelli et al. in order to enable a user to reuse the device. Again, there is no basis in the art for selecting and combining these references to render the present invention obvious. Even if it were obvious to combine these references, the combination does not render the present invention obvious. In Schaub, the chemical to be replaced is the tablet form of the chemical, and a tablet is different

than a bag containing chemical. A tablet is self-contained, not contained within a bag. If one were to place the tablet form of the chemical disclosed in Schaub into the dispenser disclosed in Nelli et al., as the Examiner suggests, the result is not a replaceable bag containing chemical. When the tablets of Schaub are depleted within the dispenser of Nelli et al., tablets must be replaced, not the bag containing the tablets, to reuse the dispenser. Therefore, replacing a bag containing chemical in the dispenser is not obvious in view of these references.

In addition, it is also not obvious to one skilled in the art because cyanuric acid is not available for purchase in such a permeable bag as in the present invention, in particular claims 19 and 22. Applicants determined the appropriate material and mesh for the permeable bag to get the desired dispensing rate of the cyanuric acid within the feeder. Rather than measuring the amount of cyanuric acid to be placed within the feeder, the empty permeable bag is replaced with a new permeable bag containing the desired amount of cyanuric acid within the feeder. A high degree of knowledge and expertise is required to maintain the appropriate level of cyanuric acid in a commercial swimming pool, and the present invention allows untrained personnel to maintain these levels. Therefore, the present invention is not well known by those skilled in the art.

When the cyanuric acid is dispensed from the feeder of the present invention, it is dissolved and in solution before it is dispensed from the feeder, not in the swimming pool as in Schaub. The dispenser of the present invention meters the dispensing of the cyanuric acid and does not interfere with the enjoyment of the swimming pool. In Schaub, the float dispenser does not meter the dispensing of the cyanuric acid, and the float dispenser interferes with the enjoyment of the swimming pool because users could swim into it as it floats along the surface of the water. The dispenser of Schaub is essentially like broadcasting the product because the product is placed in the swimming pool and dissolved as exposed to the swimming pool water. As discussed in the previously submitted Affidavit of Mr. Mock, there are problems associated with how cyanuric acid is dispensed in the industry, and these problems are solved by use of the

present invention because the present invention allows for cyanuric acid to be dispensed separately from the sanitizer during use of the pool without interfering with the enjoyment of the pool.

Favorable consideration of this Amendment is respectfully requested. The Examiner is welcome to contact the undersigned representative for the Applicants should the Examiner wish to discuss this matter.

Respectfully submitted,

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